

## DOCKETED

<b>Docket Number:</b>	15-AFC-02
<b>Project Title:</b>	Mission Rock Energy Center
<b>TN #:</b>	210320
<b>Document Title:</b>	Request for Agency Participation in the Review of the Mission Rock Energy Center Application for Certification
<b>Description:</b>	N/A
<b>Filer:</b>	Cenne Jackson
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	2/16/2016 9:38:32 AM
<b>Docketed Date:</b>	2/16/2016

**CALIFORNIA ENERGY COMMISSION**

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February 11, 2016

**TO: AGENCY DISTRIBUTION LIST****REQUEST FOR AGENCY PARTICIPATION IN THE REVIEW OF THE MISSION ROCK ENERGY CENTER APPLICATION FOR CERTIFICATION, (15-AFC-02)**

On December 30, 2015, Mission Rock Energy Center, LLC (Applicant), filed an Application for Certification (AFC) to construct and operate an electrical generating facility in Ventura County, California, approximately 2 miles west of Santa Paula, near State Highway 126. The facility, Mission Rock Energy Center (Mission Rock), would be a natural gas-fired, simple-cycle power plant comprising five combustion turbine generators (CTGs), with a nominal generating capacity of 255 megawatts (MW). Additionally, Mission Rock would house twenty (20) on-site ion battery units for the storage of electricity, providing an additional 25/100 MW (25 MW for up to 4 hours) of nominal capacity for various ancillary services. The plant would also be fitted with a clutch system to enable synchronized condenser operation which, once started, would provide voltage (VAR) support to the local grid without consuming natural gas.

**PROJECT DESCRIPTION**

The five GE LM6000 CTGs would each be capable of generating approximately 57 MW (gross) at base load. The Mission Rock facility would be expected to have an overall annual availability of 92 to 98 percent, including scheduled and forced outage occurrences.

The main project elements, including linear facilities and construction laydown areas are as follows:

- Five GE Energy LM6000 PG (*or equivalent*) CTGs equipped with selective catalytic reduction (SCR) air emissions control technology and associated support equipment for nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) control.
- Lithium-ion (*and/or flow*) batteries housed in enclosed systems that could be operated in conjunction with the power plant, or operate separately. Twenty separate enclosures would house the batteries, inverters, step-up transformers and site controller. The nominal 25 MW of energy storage would be used for ancillary, peak shaving, and other services.
- Interconnection of the five CTG's and battery array to the regional electrical grid would occur through Southern California Edison's (SCE) Santa Clara Substation via a new, 6.6-mile 230-kV transmission line.
- Natural gas pipeline connection via a new 2.4 mile, 16-inch-diameter, pipeline that would run southwest from the Mission Rock site along Shell Road and the Southern Pacific Railroad right-of-way to interconnect with Southern California Gas Company's (SoCal Gas') existing high-pressure natural gas transmission pipeline (Line 404/406).
- Process water for Mission Rock would be supplied by local agribusiness conglomerate, Limoneira Company. Limoneira will provide Title 22 recycled lemon wash and sanitary sewer wastewater from their packing house and worker housing to supply Mission Rock. Limoneira's wastewater treatment facility recycled water which will then be delivered to the Mission Rock project site via a new 1.7-mile-long pipeline.

- The recycled water pipeline could deliver a maximum amount of 170-acre feet per year of Limoneira recycled water.
- Demineralizer equipment, mounted on portable skids and proposed for location in the northeastern quadrant of the new facility, would purify recycled Limoneira water for power plant process requirements, including wash-down steam production. Following filtration, storage of the high quality purified water will occur in an adjacent 54' tall, 892,000 gallon storage tank, sufficient for 32 hours of continuous operation at maximum capacity.
- Industrial wastewater from cooling tower blow-down and other power plant processes would be discharged to an existing pipeline located along Shell Road, immediately adjacent to the Mission Rock site.
- Temporary construction laydown/parking facilities would include a 2.89-acre worker parking and laydown area immediately north of the western edge of the Mission Rock site.

## **PROJECT OPERATION**

As a peaking power plant, the Mission Rock is expected to operate during periods of increased need on the grid, such as: times of high electrical load, during periods when intermittent, renewable source generation fluctuates, when base load plants are not operating or being brought on-line, or during emergency conditions. As proposed, the facility would operate up to 28.5 percent of the time. With 150 start and stop cycles, the project would also have black start capability utilizing the battery storage array, which could operate independently of the power plant facility.

Mission Rock would provide a resource to balance the variability of renewable resources and satisfy peak energy and capacity needs during high load events. It would also support local electrical grid reliability and provide energy storage technology to meet the need for new and/or replacement local capacity in the Moorpark Subarea of the Big Creek/Ventura local reliability area of Southern California Edison's (SCE's) service territory.

## **CONSTRUCTION SCHEDULE**

Construction of Mission Rock is expected to begin in the 4<sup>th</sup> quarter of 2018, based on the assumption the project receives Commission approval in the 1<sup>st</sup> quarter of 2017. Following construction, pre-operational testing of the power plant is expected to begin in the 2<sup>nd</sup> quarter of 2020, with full-scale commercial operation expected by the 3<sup>rd</sup> quarter, 2020.

## **Energy Commission's Facility Certification Process**

The Energy Commission is responsible for reviewing and ultimately approving (or denying) all applications to construct and operate thermal electric power plants 50 MWs and larger. The Energy Commission's facility certification process carefully examines public health and safety, environmental impacts, and engineering integrity of proposed power plants and their related facilities, such as electric transmission lines and natural gas and water pipelines. The Energy Commission is the lead agency under the California Environmental Quality Act (CEQA). The first step in the review process is for Energy Commission staff to determine whether or not the AFC contains all the information required by our regulations. When the AFC is deemed to contain all the information, it becomes data adequate, and the data discovery and issue analysis phase of the Commission's 12-month licensing process begins. At that time, a detailed examination and analysis of the proposed project will occur.

Over the coming months, the Energy Commission will conduct a number of public workshops and hearings on the proposal to determine whether the proposed project should be approved for construction and operation and if so, under what set of conditions. These workshops will provide the public as well as local, state, and federal agencies the opportunity to ask questions about, and provide input on, the proposed project. The Energy Commission will issue notices for these workshops and hearings at least 10 days prior to the meeting.

### Agency Participation

During this data adequacy phase, we request that you review the AFC sections of interest to your agency and determine whether the major issues of concern have been identified. At this time, we are only concerned that such issues are disclosed, not necessarily that they be discussed in detail. We request that you provide us with any written comments you may have regarding the disclosure of any potential issues of concern by **April 1, 2016**. Please address your comments to Mike Monasmith, Project Manager, 1516 9<sup>th</sup> Street, MS-15, Sacramento, CA 95814, or call him at 916-654-4894 or by email: [mike.monasmith@energy.ca.gov](mailto:mike.monasmith@energy.ca.gov). You can also contact Associate Project Manager Mike Battles at [mike.battles.energy.ca.gov](mailto:mike.battles.energy.ca.gov) or 916-654-4063.

When the AFC is accepted as data adequate, your participation in the proceeding will continue to be valuable and encouraged and will allow you to identify and help to resolve issues of concern to your agency. There may be specific requests for agency review and comment during the proceedings after the AFC has been determined to be data adequate

Enclosed is a copy (CD) of the AFC in electronic format. If you would like to have a paper copy of the AFC sent to you, if you have questions, or if you would like additional information on how to participate in the Energy Commission's review of the proposed project, please contact Project Manager, Mike Monasmith or Associate Project Manager Mike Battles. The proposed project, copies of notices, electronic version of the AFC, and other relevant documents are also available on the Energy Commission's Internet web site at <http://www.energy.ca.gov/sitingcases/missionrock>. If you wish to be on the mailing list, you can also subscribe to receive e-mail notifications at <http://www.energy.ca.gov/listservers>.

Sincerely,



Chris Davis, Manager  
Energy Facilities Siting Office

Enclosure  
cc: Agency List 7507